

AMENDMENTS TO THE CLAIMS

Please add new Claim 16 as follows.

LISTING OF CLAIMS

1.-2. (cancelled)

3. (previously presented) A heat exchanger according to Claim 9, wherein the third tubes are provided extending in the vertical direction, and the hole is provided in the header tank on the lower side.

4. (previously presented) A heat exchanger according to Claim 9, wherein the temperature of the first fluid is higher than that of the second fluid.

5. (previously presented) A heat exchanger according to Claim 9, wherein the first fluid is engine coolant which flows in the first tubes and the second fluid is electric system coolant for cooling an electric motor and a control circuit for the motor which flows in the second tubes.

6. (previously presented) A heat exchanger according to Claim 9, wherein each of the header tanks includes a core plate into which the longitudinal end portions of the first tubes, the second tubes and the third tubes are inserted and a tank body for defining the chamber in the header tank together with the core plate, and wherein the first tubes, the second tubes, the third tubes, the fins, and the core plate are made of aluminum and the tank body is made of resin.

7. (previously presented) A heat exchanger according to Claim 9, wherein the header tank includes a core plate into which the longitudinal end portions of the first tubes, the second tubes and the third tubes are inserted and a tank body for defining the chamber in the header tank together with the core plate, and wherein the first tubes, the second tubes, the third tubes, the fins, the core plate, the tank body and the separator are made of aluminum.

8. (previously presented) A heat exchanger according to Claim 7, wherein the core plate and the separator are joined to each other by means of brazing.

9. (previously presented) A heat exchanger comprising:
a plurality of first tubes made of metal in which a first fluid circulates;
a plurality of second tubes made of metal in which a second fluid circulates;
a plurality of third tubes disposed between the first and second plurality of tubes;
a pair of header tanks made of metal communicating with the first tubes, the second tubes and the third tubes; and
two separators made of metal disposed in each of the header tanks to divide a chamber in each of the header tanks into a first space communicating with the first tubes and a second space communicating with the second tubes, the two

separators defining a third space between the first space and the second space communicating with the third tubes; wherein

the two separators are joined by brazing to a respective header tank under the condition that the two separators are inserted from a slit hole formed in the respective header tank;

a hole for communicating the third space with the outside of the respective header tank is formed in the respective header tank; and

there is no fluid inlet or outlet associated with either of the third spaces.

10. (previously presented) A method of manufacturing a heat exchanger,

the heat exchanger comprising: a plurality of first tubes made of metal in which a first fluid circulates; a plurality of second tubes made of metal in which a second fluid circulates; a plurality of third tubes disposed between said first and second plurality of tubes; a pair of header tanks made of metal communicating with the first tubes, the second tubes and the third tubes, the header tanks being arranged at both longitudinal end sides of the first tubes, the second tubes and the third tubes; and two separators made of metal disposed in each of the header tanks divide a chamber in each of the header tanks into a first space communicating with the first tubes and a second space communicating with the second tubes, the two separators defining a third space between the first space and the second space communicating with the third tubes; wherein the two separators are joined by brazing to a respective header tank under the condition that the two separators are inserted from a slit hole formed in the respective header tank, a hole for communicating the third space with the outside of the respective

header tank is formed in the respective header tank, and there is no fluid inlet or outlet associated with either of the third spaces,

the method of manufacturing the heat exchanger comprising the steps of: coating flux on the separators after the separators have been inserted into the respective header tank; brazing the separators and the respective header tank to each other; and conducting an inspection for leaks by using the hole.

11. (previously presented) A method of manufacturing a heat exchanger according to Claim 10, further comprising the step of inspecting and repairing a brazed portion of the separators and the respective header tank after the separators and the respective header tank have been brazed to each other.

12. (cancelled)

13. (previously presented) A heat exchanger according to Claim 9, wherein the third space forms a heat-insulating space for insulating between the first space and the second space.

14.-15. (cancelled)

16. (new) A heat exchanger comprising:
a plurality of first tubes in which a first fluid circulates;

first fins for facilitating heat exchange, the first fins being arranged between the first tubes;

a plurality of second tubes in which a second fluid circulates;

second fins for facilitating heat exchange, the second fins being arranged between the second tubes;

a plurality of third tubes disposed between the first and second plurality of tubes;

a pair of header tanks communicating with the first and second plurality of tubes, the header tanks being arranged at both longitudinal end sides of the first and second plurality of tubes;

two separators disposed in each of the header tanks to divide a chamber in each of the header tanks into a first space communicating with the first tubes and a second space communicating with the second tubes, the two separators defining a third space between the first space and the second space communicating with the third tubes;

a hole for communicating the third space with the outside of the respective header tank is formed in the respective header tank; and

there is no fluid inlet or outlet associated with either of the third spaces.